Claim 1 (original) A method comprising:

provientding a user-defined data type;

providing security information for the user-defined data type;

storing data instances according to the user-defined data type; and

associating the security information with the data instances.

Claim 2 (original) The method of claim 1, wherein associating the security information comprises associating the security information with each individual data instance.

Claim 3 (original) The method of claim 1, wherein associating the security information comprises associating an access list containing a list of identifiers of authorized entities.

Claim 4 (original) The method of claim 1, further comprising:

providing one or more functions to perform predetermined one or more tasks for the user-defined data type; and

invoking the one or more functions to process data instances according to the user-defined data type.

Claim 5 (original) An article comprising at least one storage medium containing instructions executable in a database system, the instructions when executed causing the database system to:

provide a first data type defining security information relating to access rights;

store an instance of data according to the first data type in the database system; and

associate the security information with the instance of data.

Claim 6 (original) The article of claim 5, wherein the instructions when executed cause the database system to further:

        receive a request to access the instance of data; and

        grant access to the instance of data based on the security information.

Claim 7 (original) The article of claim 5, wherein the instructions when executed cause the database system to provide the first data type by providing a user-defined data type.

Claim 8 (original) The article of claim 7, wherein the instructions when executed cause the database system to provide the user-defined data type by providing the user-defined data type in an object relational database system.

Claim 9 (original) The article of claim 5, wherein the instructions when executed cause the database system to store the instance of data by storing the instance of data in an object relational database system.

Claim 10 (original) The article of claim 5, wherein the instructions when executed cause the database system to further associate one or more functions with the instance of data, the one or more functions to provide one or more predefined tasks.

Claim 11 (original) The article of claim 10, wherein the instructions when executed cause the database system to further invoke at least one of the functions to add an identifier of an authorized entity to the security information, the authorized entity being authorized to access the instance of data.

Claim 12 (original) The article of claim 11, wherein the authorized entity comprises an authorized user.

Claim 13 (original) The article of claim 11, wherein the security information comprises a list of identifiers of authorized entities.

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Claim 14 (original) The article of claim 11, wherein the instructions when executed cause the database system to further invoke another one of the security functions to remove an identifier from the security information.

Claim 15 (original) The article of claim 5, wherein the instructions when executed cause the database system to provide the first data type by providing the first data type defining one or more security functions to perform one or more predefined tasks.

Claim 16 (original) The article of claim 15, wherein the instructions when executed cause the database system to further provide a second data type built upon the first data type, the second data type inheriting the security information and one or more security functions of the first data type, wherein the second data type further defines one or more additional security functions.

Claim 17 (currently amended) A database system, comprising:
    one or more storage modules to store instances of data, each instance of data being accessed according to a first secure data type associated with security information; and
    a controller adapted to determine whether or not to grant access to one of the instances of data in response to a query based on whether the associated security information indicates that a source of the query has permission to access the one instance of data.

Claim 18 (original) The database system of claim 17, comprising an object relational database management system.

Claim 19 (original) The database system of claim 17, wherein the first secure data type comprises a user-defined data type.

Claim 20 (original) The database system of claim 17, the one or more storage modules to further store instances of data according to a second secure data type.

Claim 21 (original) The database system of claim 20, wherein the second secure data type is inherited from the first secure data type.

Claim 22 (original) The database system of claim 17, wherein each instance of data is further associated with one or more methods defined by the first secure data type, and wherein the controller is adapted to invoke the one or more methods to process instances of data according to the first secured data type.

Claim 23 (original) A database system comprising:

one or more storage modules to store data instances according to a secure user-defined data type, the secure user-defined data type defining security information and one or more security functions; and

a controller adapted to receive a Structured Query Language query originated by a source for one of the data instances, the controller adapted to determine if the source is authorized to access the one data instance based on the security information,

the controller adapted to further invoke the one or more security functions to process the one data instance.

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